

Notice of Allowability

Application No.

09/731,799

Applicant(s)

DEGUCHI, MASAHIRA

Examiner

Thomas H. Stevens

Art Unit

2123

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 2/14/06.
2. ☒ The allowed claim(s) is/are 1-16.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
- ☒ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|---|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |

DETAILED ACTION

1. Claims 1-16 were examined.

Allowable Subject Matter

2. Claims 1-16 are allowable.

3. The following is an examiner's statement of reasons for allowance:

While US Patent 5,448,696 (claim 1) teaches a plurality of attributes forming a three-dimensional model of an object; US Patent 6,058,209 teaches (claim 1 and 14) redundant attributes; (claim 14) a computer-readable storage medium storing a program used to direct a computer to perform; detecting one or more redundant attributes from a plurality of attributes; (claim 16) detection means for detecting one or more redundant attributes from a plurality of attributes; US Patent 5,448,652 teaches (claim 1) generating a list of attributes to be deleted and a list of attributes; US Patent 5,754,738 teaches (claims 15 and 16) a method of optimizing a model, (claim 1) teaches a model optimization apparatus, none of these references, taken either alone or in combination, with the prior art of record disclose

(claim 1) "a detection unit detecting one or more redundant attributes ... by comparing attribute coordinates... to be amended among the one or more redundant attributes responsive to the coordinate based comparison; deletion unit deleting attribute information of attributes in the list of the attributes to be deleted, and amending attribute information of attributes in the list of the attributes to be amended; and a construction unit reconstructing a three-dimensional model of the object according to remaining

attribute information including the amended attribute information and attribute information of attributes other than the one or more redundant attributes,”

(claim 14) “forming a three-dimensional model of an object by comparing attribute coordinates, and generating a list of attributes to be deleted and a list of attributes to be amended among the one or more redundant attributes responsive to the coordinate based comparison; deleting attribute information of attributes in the list of the attributes to be deleted, and amending attribute information of attributes in the list of attributes to be amended; and reconstructing a three-dimensional model of the object according to remaining attribute information including the amended attribute information and attribute information of attributes other than the one or more redundant attributes,”

(claim 15) “automatically detecting one or more redundant attributes from a plurality of attributes forming a three-dimensional model of an object by comparing attribute coordinates, and generating a list of attributes to be deleted and a list of attributes to be amended among the one or more redundant attributes responsive to the coordinate based comparison; automatically deleting attribute information of attributes in the list of the attributes to be deleted, and amending attribute information of attributes in the list of the attributes to be amended; and automatically reconstructing a three-dimensional model of the object according to remaining attribute information including the amended attribute information and attribute information of attributes other than the one or more redundant attributes,”

(claim 16) "forming a three-dimensional model of an object by comparing attribute coordinates, and generating a list of attributes to be deleted and a list of attributes to be amended among the one or more redundant attributes responsive to the coordinate based comparison; deletion means for deleting attribute information of attributes in the list of attributes to be deleted, and amending attribute information of attributes in the list of the attributes to be amended; and construction means for reconstruction a three-dimensional model of the object according to remaining attribute information including the amended attribute information and attribute information of attributes other than the one or more redundant attributes,"

in combination with the remaining elements and features of the claimed invention. It is for these reasons that the applicants' invention defines over the prior art of record.

Furthermore, the current claims are novel in view of the prior art used within the previous office action since Migdal (US Patent 6,208,347) teaches deleting redundant shapes and Kramer's (US Patent 5,452,238) teaching of geometric modeling with kinematic analysis.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance".

Correspondence Information

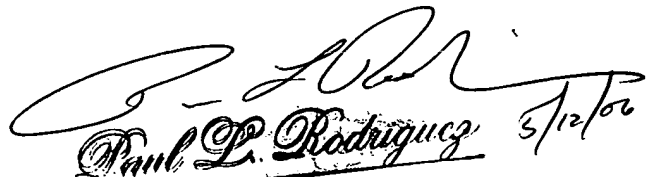
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mr. Tom Stevens whose telephone number is 571-272-3715, Monday-Friday (8:00 am- 4:30 pm EST).

If attempts to reach the examiner by telephone are unsuccessful, please contact examiner's supervisor Mr. Paul Rodriguez 571-272-3753. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Answers to questions regarding access to the Private PAIR system, contact the Electronic Business Center (EBC) (toll-free (866-217-9197)).

April 28, 2006

TS


Paul L. Rodriguez 5/12/06
Primary Examiner
Art Unit 2125 2123